

M-17

## PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

To:

Assistant Commissioner for Patents  
 United States Patent and Trademark  
 Office  
 Box PCT  
 Washington, D.C.20231  
 ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 27 March 2000 (27.03.00)
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International application No. PCT/US99/13281	Applicant's or agent's file reference PF-0539 PCT
International filing date (day/month/year) 11 June 1999 (11.06.99)	Priority date (day/month/year) 12 June 1998 (12.06.98)

Applicant LAL, Preeti et al
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1. The designated Office is hereby notified of its election made:

 in the demand filed with the International Preliminary Examining Authority on:

06 January 2000 (06.01.00)

 in a notice effecting later election filed with the International Bureau on:

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2. The election  was was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  Kiwa Mpay
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>PF-0539 PCT</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No <b>PCT/US 99/ 13281</b>	International filing date ( <i>day/month/year</i> ) <b>11/06/1999</b>	(Earliest) Priority Date ( <i>day/month/year</i> ) <b>12/06/1998</b>
Applicant <b>INCYTE PHARMACEUTICALS, INC. et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of **6** sheets.

It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b))
- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :
  - contained in the international application in written form.
  - filed together with the international application in computer readable form
  - furnished subsequently to this Authority in written form.
  - furnished subsequently to this Authority in computer readable form.
  - the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
  - the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2.  **Certain claims were found unsearchable** (See Box I).

3.  **Unity of invention is lacking** (see Box II)

4. With regard to the **title**,

- the text is approved as submitted by the applicant.
- the text has been established by this Authority to read as follows

5. With regard to the **abstract**,

- the text is approved as submitted by the applicant.
- the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

- as suggested by the applicant
- because the applicant failed to suggest a figure.
- because this figure better characterizes the invention

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None of the figures

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 99/ 13281

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

see FURTHER INFORMATION sheet PCT/ISA/210

2.  Claims Nos.: 17, 18, 20 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

see FURTHER INFORMATION sheet PCT/ISA/210

3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see additional sheet, subject 1.

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box 3.

Although claims 19,20 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

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Further defect(s) under Article 17(2)(a):

Continuation of Box 3.

Claims Nos.: 17,18,20

Claims 17 and 18 relate to an agonist and antagonist, respectively, of the polypeptide without giving a true technical characterization. In addition, claim 20 relates back to claim 18 for the use of said antagonist in a medical treatment claim. Therefore, the scope of said claims is ambiguous and vague, and their subject-matter is not sufficiently disclosed and supported (Art. 5 and 6 PCT).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

1. Claims: in part: 1-16,19

Polypeptide, antibody and pharmaceutical composition relating to SEQ ID NO 1; polynucleotide, expression vector, and host cell relating to SEQ ID NO 32

2-31. Claims: in part: 1-16,19

Polypeptide, antibody and pharmaceutical composition relating to SEQ ID NO 2-31; polynucleotide, expression vector, and host cell relating to SEQ ID NO 33-62

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 99/13281

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 6 C12N15/12 C07K14/47 C07K16/18 A61K38/17

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 6 C12N C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SU L ET AL: "LYAR, a novel nucleolar protein with zinc finger DNA-binding motifs, is involved in cell growth regulation" GENES AND DEVELOPMENT., vol. 7, 1993, COLD SPRING HARBOR LABORATORY PRESS, NEW YORK., US, pages 735-748, XP002118338 see figure 1 ---	1,3,5,9
X	EP 0 679 716 A (MATSUBARA, KENICHI ET AL) 2 November 1995 SEQ ID NO 1837 see figure 1 ---	5,9 -/-

Further documents are listed in the continuation of box C

Patent family members are listed in annex

## ° Special categories of cited documents

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&\* document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

12 October 1999

09 02 2000

Name and mailing address of the ISA

European Patent Office, P B 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel: (+31-70) 340-2040, Tx 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

ESPEN, J

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 99/13281

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	HILLIER L ET AL.: "Homo sapiens cDNA clone 743852, similar to TR:G300372 Cell Growth Regulating Nucleolar Protein" EMEST DATABASE ENTRY AA634416, ACCESSION NUMBER AA634416, 31 October 1997, XP002118339 sequence see figure 1 ---	5,9,11
X	HILLIER L ET AL: "Homo sapiens cDNA clone 366009, similar to TR:G300372 Cell Growth Regulating Nucleolar Protein" EMEST DATABASE ENTRY HSA63624, ACCESSION NUMBER AA063624, 25 September 1996, XP002118340 sequence see figure 1 -----	5,9,11

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/US 99/13281

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 679716 A	02-11-1995	AU 8116494 A CA 2153480 A WO 9514772 A	13-06-1995 01-06-1995 01-06-1995

**PATENT COOPERATION TREATY**  
**PCT**  
INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PF-0539 PCT	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/US99/13281	International filing date (day/month/year) 11 JUNE 1999	Priority date (day/month/year) 12 JUNE 1998
International Patent Classification (IPC) or national classification and IPC Please See Supplemental Sheet.		
Applicant INCYTE PHARMACEUTICALS, INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 1 sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 06 JANUARY 2000	Date of completion of this report 03 JULY 2000
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer NANCY A. JOHNSON Telephone No. (703) 308-0196

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/13281

**I. Basis of the report****1. With regard to the elements of the international application:\*** the international application as originally filed the description:

pages 1-79, as originally filed

pages NONE

pages NONE, filed with the demand

 the claims:

pages 80-81, as originally filed

pages NONE, as amended (together with any statement) under Article 19

pages NONE, filed with the demand

pages NONE, filed with the letter of \_\_\_\_\_

 the drawings:

pages NONE, as originally filed

pages NONE, filed with the demand

pages NONE, filed with the letter of \_\_\_\_\_

 the sequence listing part of the description:

pages 1-66, as originally filed

pages NONE, filed with the demand

pages NONE, filed with the letter of \_\_\_\_\_

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:** the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:** contained in the international application in printed form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.**4.  The amendments have resulted in the cancellation of:** the description, pages NONE the claims, Nos NONE the drawings, sheets/fig NONE**5.  This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*****\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).****\*\*Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.**

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/13281

**III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been and will not be examined in respect of:

 the entire international application. claims Nos. 17, 18, 20

because:

 the said international application, or the said claim Nos. relate to the following subject matter which does not require international preliminary examination (specify). the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (specify). the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed. no international search report has been established for said claims Nos. 17, 18, 20.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

 the written form has not been furnished or does not comply with the standard. the computer readable form has not been furnished or does not comply with the standard.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/13281

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

## 1. statement

## Novelty (N)

Claims 2, 4, 6-8, 10, 12-16, 19

YES

Claims 1, 3, 5, 9, 11

NO

## Inventive Step (IS)

Claims 2, 4, 6-8, 10, 12-16, 19

YES

Claims 1, 3, 5, 9, 11

NO

## Industrial Applicability (IA)

Claims 1-16, 19

YES

Claims NONE

NO

## 2. citations and explanations (Rule 70.7)

Claims 1, 3, 5, 9 lack novelty under PCT Article 33(2) as being anticipated by Su. Su discloses a polypeptide that is the same as SEQ ID NO:1 and a polynucleotide that is the same as SEQ ID NO:32.

Claims 5, 9 novelty under PCT Article 33(2) as being anticipated by EP0679716. EP0679716 discloses a polynucleotide that is the same as SEQ ID NO:32.

Claims 5, 9, 11 lack novelty under PCT Article 33(2) as being anticipated by either of Accession No. AA634416 or AA063624. Both Accession No. discloses a polynucleotide that is the same as SEQ ID NO:32.

Claims 1-16 and 19 have industrial applicability as defined by PCT Article 33(4).

Claims 2, 4, 6-8, 10, 12-16 and 19 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest polypeptides, polynucleotides, antibodies or methods that are the same as that claimed.

----- NEW CITATIONS -----  
NONE

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/13281

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

**CLASSIFICATION:**

The International Patent Classification (IPC) and/or the National classification are as listed below:  
IPC(7): C07K 14/435; C07H 21/04; C12N 5/11, 15/63, 1/21; C12Q 1/68; A61K 38/17 and US Cl.: 435/6, 320.1, 252.3, 69.1; 530/300, 350; 536/23.1, 23.5, 24.31; 514/2

**I. BASIS OF REPORT:**

5. (Some) amendments are considered to go beyond the disclosure as filed:  
NONE



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : <b>C12N 15/12, C07K 14/47, 16/18, A61K 38/17</b>		A3	(11) International Publication Number: <b>WO 99/64596</b> (43) International Publication Date: 16 December 1999 (16.12.99)
(21) International Application Number: PCT/US99/13281		GLER, Karl, J. [CH/US]; 1048 Oakland Avenue, Menlo Park, CA 94025 (US). GORGONE, Gina, A. [US/US]; 1253 Pinecrest Drive, Boulder Creek, CA 95005 (US). BAUGHN, Mariah, R. [US/US]; 14244 Santiago Road, San Leandro, CA 94577 (US). PATTERSON, Chandra [US/US]; 490 Sherwood Way #1, Menlo Park, CA 94025 (US). LU, Dyung, Aina, M. [US/US]; 55 Park Belmont Place, San Jose, CA 95136 (US).	
(22) International Filing Date: 11 June 1999 (11.06.99)		(74) Agents: BILLINGS, Lucy, J. et al.; Incyte Pharmaceuticals, Inc., 3174 Porter Drive, Palo Alto, CA 94304 (US).	
(30) Priority Data: 60/089,029 12 June 1998 (12.06.98) US 60/094,575 29 July 1998 (29.07.98) US 60/104,624 14 October 1998 (14.10.98) US		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Applications US 60/094,575 (CIP) Filed on 29 July 1998 (29.07.98) US 60/104,624 (CIP) Filed on 14 October 1998 (14.10.98) US 60/089,029 (CIP) Filed on 12 June 1998 (12.06.98)		(72) Inventors; and (75) Inventors/Applicants (for US only): LAL, Preeti [IN/US]; 2382 Lass Drive, Santa Clara, CA 95054 (US). YUE, Henry [US/US]; 826 Lois Avenue, Sunnyvale, CA 94087 (US). TANG, Y., Tom [CN/US]; 4230 Ranwick Court, San Jose, CA 95118 (US). HILLMAN, Jennifer, L. [US/US]; 230 Monroe Drive #12, Mountain View, CA 94040 (US). BANDMAN, Olga [US/US]; 366 Anna Avenue, Mountain View, CA 94043 (US). CORLEY, Neil, C. [US/US]; 1240 Dale Avenue #30, Mountain View, CA 94040 (US). GUE-	
(71) Applicant (for all designated States except US): INCYTE PHARMACEUTICALS, INC. [US/US]; 3174 Porter Drive, Palo Alto, CA 94304 (US).		Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.	
(76) Date of publication of the international search report:		6 April 2000 (06.04.00)	

(54) Title: PROTEINS REGULATING GENE EXPRESSION

## (57) Abstract

The invention provides human proteins regulating gene expression (PRGE) and polynucleotides which identify and encode PRGE. The invention also provides expression vectors, host cells, antibodies, agonists, and antagonists. The invention also provides methods for diagnosing, treating or preventing disorders associated with expression of PRGE.

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
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AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
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BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
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CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

# INTERNATIONAL SEARCH REPORT

Internal Application No

PCT/US 99/13281

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 6 C12N15/12 C07K14/47 C07K16/18 A61K38/17

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 6 C12N C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category <sup>a</sup>	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SU L ET AL: "LYAR, a novel nucleolar protein with zinc finger DNA-binding motifs, is involved in cell growth regulation" GENES AND DEVELOPMENT., vol. 7, 1993, COLD SPRING HARBOR LABORATORY PRESS, NEW YORK., US, pages 735-748, XP002118338 see figure 1 --- EP 0 679 716 A (MATSUBARA, KENICHI ET AL) 2 November 1995 SEQ ID NO 1837 see figure 1 ---	1,3,5,9
X	-/-	5,9

Further documents are listed in the continuation of box C

Patent family members are listed in annex.

<sup>a</sup> Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

12 October 1999

Date of mailing of the international search report

09.02.2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.  
 Fax: (+31-70) 340-3016

Authorized officer

ESPEN, J

## INTERNATIONAL SEARCH REPORT

Internat'l Application No

PCT/US 99/13281

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HILLIER L ET AL.: "Homo sapiens cDNA clone 743852, similar to TR:G300372 Cell Growth Regulating Nucleolar Protein" EMEST DATABASE ENTRY AA634416, ACCESSION NUMBER AA634416, 31 October 1997, XP002118339 sequence see figure 1 ---	5,9,11
X	HILLIER L ET AL: "Homo sapiens cDNA clone 366009, similar to TR:G300372 Cell Growth Regulating Nucleolar Protein" EMEST DATABASE ENTRY HSA63624, ACCESSION NUMBER AA063624, 25 September 1996, XP002118340 sequence see figure 1 -----	5,9,11

# INTERNATIONAL SEARCH REPORT

In. .ational application No

PCT/US 99/13281

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

see FURTHER INFORMATION sheet PCT/ISA/210

2.  Claims Nos.: 17, 18, 20 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically.

see FURTHER INFORMATION sheet PCT/ISA/210

3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see additional sheet, subject 1.

### Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

International Application No. PCT/ US 99/13281

### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box 3.

Although claims 19,20 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

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Further defect(s) under Article 17(2)(a):

Continuation of Box 3.

Claims Nos.: 17,18,20

Claims 17 and 18 relate to an agonist and antagonist, respectively, of the polypeptide without giving a true technical characterization. In addition, claim 20 relates back to claim 18 for the use of said antagonist in a medical treatment claim. Therefore, the scope of said claims is ambiguous and vague, and their subject-matter is not sufficiently disclosed and supported (Art. 5 and 6 PCT).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

# INTERNATIONAL SEARCH REPORT

International Application No. PCT/US 99/13281

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

### 1. Claims: in part: 1-16,19

Polypeptide, antibody and pharmaceutical composition relating to SEQ ID NO 1; polynucleotide, expression vector, and host cell relating to SEQ ID NO 32

### 2-31. Claims: in part: 1-16,19

Polypeptide, antibody and pharmaceutical composition relating to SEQ ID NO 2-31; polynucleotide, expression vector, and host cell relating to SEQ ID NO 33-62

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/13281

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
EP 679716	A 02-11-1995	AU 8116494 A		13-06-1995
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		CA 2153480 A		01-06-1995
		WO 9514772 A		01-06-1995